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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,677	07/03/2003	Frank R. Jones	6260	7370
28484	7590	04/25/2005	EXAMINER	
BASF AKTIENGESELLSCHAFT CARL-BOSCH STRASSE 38, 67056 LUDWIGSHAFEN LUDWIGSHAFEN, 69056 GERMANY			THEXTON, MATTHEW	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,677

Applicant(s)

JONES ET AL.

Examiner

Matthew A. Thexton

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date one sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The methods set forth require removing "a first liter of the dispersion that passes through the milling apparatus" in each of the three steps. This is without importance since the throughput is not specified; the liter could be substantially all or substantially none of the stream. Each step is said "to form a [first/second/third] pass milled dispersion..." It is not clear whether this refers to the removed liter, or the portion passing through after the first liter.

Claims Analysis

Claim 1 is directed to methods of making coated additive by dispersing the additive in aqueous solution with one or more dispersing agents, at least one of which comprises a copolymer of ethylene and acrylic acid, and spray drying. Claims 2-9 depend therefrom and further require various process limitations, particle size, proportions, additional dispersant of block copolymer of alkylene oxides. Claim 10 depends from claim 1 and is directed to further combining with a carrier. Claim 11 depends from claim 1 and is directed to the product of the process.

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Claim 12 is independent and is directed to powder comprising an additive and dispersant of copolymer of ethylene and acrylic acid and dispersant of block copolymer of alkylene oxides. Claims 13-21 depend therefrom and further require various limitations on particle size, proportions, and specifics of the dispersant of block copolymer of alkylene oxides. Claim 22 depends from claim 12 and is directed to further having a carrier.

35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim Rejections

Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones et al.(US 5833893-A) in view of Scheibelhoffer et al. (US 5670561-A).

The present claims are discussed in the section **Claims Analysis** hereinabove.

Reference '893 discloses methods of preparing additive concentrates employing pigments of mean particle size of 0.1 to 2 microns (column 6, lines 34-38) dispersed in aqueous dispersants such as vinyl copolymers and alkyleneoxide copolymers (column 6, line 61 to column 8, line 4) such as Pluronic 25R2 which is milled, e.g. three passes (example 1 et al.) and spray dried (column 7, lines 5-23, examples) at conditions

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encompassed by Applicant claim 5 (examples); and subsequently incorporated with carrier to make pastes (column 6, lines 10-21). This reference does not give any examples of vinyl copolymer dispersant, but suggests them as equivalent to the exemplified polyesters (LB-100). Given the objective of intimate mixing (e.g., column 7, lines 54-61) of the dispersant and additive, the limitation of claim 2 would be readily determined by routine experimentation and thus obvious to one of ordinary skill in the art at the time of the invention. Given the mean particle size range disclosed, the limitation of present claim 4 would have been obvious to one of ordinary skill in the art at the time of the invention since larger sizes would incur lower quality product in the disclosed applications, and a sharp or narrow size distribution would be preferred for controlling quality. Claims 1-5, 10-12, 16, and 20-22 would have been obvious to one of ordinary skill in the art at the time of the invention since vinyl copolymer dispersant is suggested as equivalent to the exemplified polyesters.

Reference '561 discloses methods of preparing additive concentrates employing pigments dispersed in aqueous dispersants such as vinyl copolymers such as Primacor (column 7, lines 7-16). It would have been obvious to have employed this specific type of dispersant in the processes and products of reference '893 given that it is within the broad suggestion of vinyl copolymers and is disclosed to be useful as a pigment dispersant, thus arriving at the limitations of claims 6-9, 13-15, and 17-19.

Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blackburn et al. (US 4089699).

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The present claims are discussed in the section ***Claims Analysis*** hereinabove.

The reference discloses forming pigment dispersions, adding a combination of a nonionic polyether surfactant and a polymeric carboxylic acid material, precipitating and recovering the pigment (column 3, lines 3-14), which is "readily" re-dispersible in aqueous solutions. The polymeric carboxylic acid may be copolymer of acrylic acid (column 2, line 34) and ethylene (column 2, line 38-40). The proportions are encompassed by Applicant's claims.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Higgs (US 5633295-A) discloses dispersions of inorganic additives. It fails to disclose the dispersants of Applicant's claims.

Mollinger et al. (US 4670181) discloses dispersions of additive plus surfactant plus film forming binder which is dried to form dustless pellets. It fails to disclose the dispersants of Applicant's claims or the specific methods of Applicant's claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew A. Thexton whose telephone number is 571-272-1125. The examiner can normally be reached on Monday-Friday, 9:30 to 6.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan S. Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew A. Thexton
Primary Examiner
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